AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image processing method for eliminating noise from electronic data of an input image by smoothing the electronic data, the method comprising:

computing a smoothing intensity based on a~~first~~ ~~intensity~~ intensities of a predetermined color component output from a pixel of interest and ~~a second intensity of predetermined color~~ ~~components output from~~ pixels surrounding the pixel of interest, constituting a matrix centered on the pixel of interest; and

wherein, in the computing step, the smoothing intensity is computed on the basis of a distribution expression representing ~~the predetermined color component and~~ the frequency of noise with respect to the predetermined color component in such a manner that when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is high, a rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a large value, and when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is low, the rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a small value.

2. (previously presented): The image processing method according to claim 1, wherein

smoothing the electronic data by distributing the intensity of a pixel of interest is based on

predetermined filter information selected on the basis of the smoothing intensity.

3. (previously presented): The image processing method according to claim 1, further

comprising:

preparing filter information on the basis of the smoothing intensity; and

smoothing the electronic data on the basis of the filter information prepared.

4. (currently amended): A recording medium storing an image processing program for

causing a computer to perform processing for eliminating noise from electronic data pertaining

to an image entered by way of input unit, by smoothing the electronic data, the computer being

caused by the image processing program to perform:

computing a smoothing intensity based on a first intensity intensities of a predetermined

color component output from a pixel of interest from among a plurality of pixels constituting an

image input by way of the input unit and a second intensity of predetermined color components

output from pixels surrounding the pixel of interest constituting a matrix centered on the pixel of

interest; and

a smoothing step for smoothing the electronic data through use of the computed

smoothing intensity and outputting the smoothed electronic data;

wherein, in the computing step, smoothing intensity is computed on the basis of a

distribution expression representing ~~a relationship between the intensity of the predetermined~~

~~color component and~~ the frequency of noise with respect to the intensity of the predetermined

color component in such a manner that when the smoothing intensity with respect to the intensity

of the predetermined color component output from the pixel of interest is high, a rate at which

the intensity of the predetermined color component output from the pixel of interest is to be

distributed to surrounding pixels constituting the matrix is set to a large value, and when the

smoothing intensity with respect to the intensity of the predetermined color component output

from the pixel of interest is low, the rate at which the intensity of the predetermined color

component output from the pixel of interest is to be distributed to surrounding pixels constituting

the matrix is set to a small value.

5. (previously presented): The recording medium according to claim 4, further

comprising:

a filter information selection step of selecting predetermined filter information, on the

basis of the smoothing intensity,

wherein, in the smoothing step, the electronic data are smoothed and output through use

of the predetermined filter information.

6. (previously presented): The recording medium according to claim 4, further

comprising:

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a filter information preparation step of preparing filter information on the basis of the

smoothing intensity computed in the intensity computation step, and

wherein, in the smoothing step, the electronic data are smoothed and output through use

of the prepared filter information.

7. (currently amended): An image processing apparatus comprising:

an image input unit into which image information is input and which can output the

image information as electronic data; and

an intensity computation unit for computing a smoothing intensity based on an intensity

of a predetermined color component included in the electronic data output from the image input

unit,

wherein the smoothing intensity is computed on the basis of a distribution expression

representing the predetermined color component and the frequency of noise with respect to the

predetermined color component in such a manner that when the smoothing intensity with respect

to the intensity of the predetermined color component output from the pixel of interest is high, a

rate at which the intensity of the predetermined color component output from the pixel of interest

is to be distributed to surrounding pixels constituting the matrix is set to a large value, and when

the smoothing intensity with respect to the intensity of the predetermined color component

output from the pixel of interest is low, the rate at which the intensity of the predetermined color

component output from the pixel of interest is to be distributed to surrounding pixels constituting

the matrix is set to a small value.

8. (previously presented): The image processing apparatus according to claim 7, further

comprising:

a storagedevice in which predetermined filter information is stored;

a filter information selection circuit for selecting specific filter information from the

predetermined filter information on the basis of the smoothing intensity computed by the

intensity computation unit;

a smoothing circuit for smoothing the electronic data output from the image input unit on

the basis of the specific filter information; and

a writing circuit for recording the electronic data smoothed by the smoothing unit into the

storage device.

9. (previously presented): The image processing apparatus according to claim 7, further

comprising:

a filter information preparation circuit for preparing filter information based on the

smoothing intensity;

a smoothing unit for smoothing the electronic data on the basis of the prepared filter

information;

a storage device for recording the electronic data smoothed by the smoothing circuit; and

a writing circuit for writing the electronic data smoothed by the smoothing circuit into the

storage device.

10-16 (Canceled)